

THE ESSEX FLOODS 1953

In the night of 31 January 1953, a storm in the North Sea caused a storm surge which occurred at the same time as a high spring tide. Although the storm and surge were forecast in advance, public warning systems were not very effective at this time and many people were not prepared for the flooding. More than 2500 people were killed around the North Sea coastline, including 307 in England, **of which 104 were in Essex – 34% of the total UK lives lost.** and 19 in Scotland.

Why was the death toll so high?

THE REASONS FOR THE HIGH DEATH TOLL

There are several reasons for the high death toll.

- The disaster was unprecedented, it occurred during the coldest months of the year and at night over a weekend. The temperatures well below the late January average.
- Many deaths occurred to residents of substandard houses located in low lying land susceptible to flooding.
- There was no national disaster warning system in place.
- There was no peacetime civil defence service.
- Most of the flood defences were in a poor state of repair or inadequate for the height of the tidal surge. Some sea walls did not meet the Standards of the 1949 Coast Protection Act and were not well maintained.
- Emergency service communications were disrupted by gale force winds.
- The national broadcaster, the British Broadcasting Corporation, did not transmit between midnight and 7 a.m. when the weather event occurred.
- A peak in the number of people in Essex suffering from influenza was nearly 5,600 on the Tuesday following the disaster which meant many key workers were absent from their work at the time of the floods.



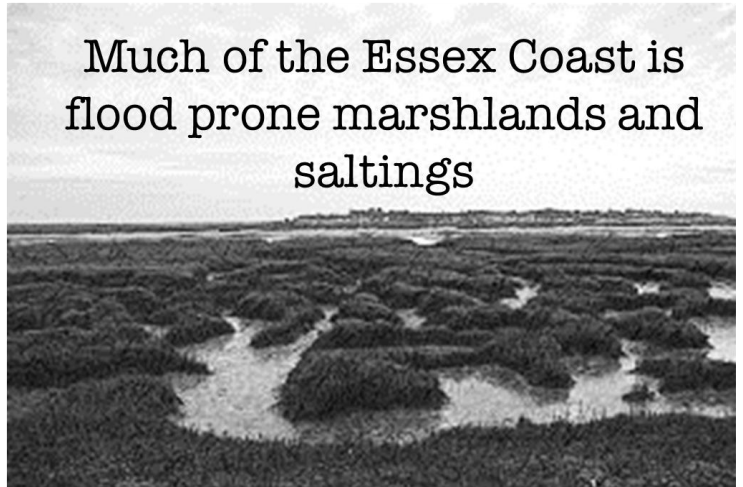
The death toll would have been much higher were it not for the heroic efforts of the hundreds of residents, civil servants, local government officers, emergency service officers, members of the Red Cross, the St Johns Ambulance Brigade, the Women's Voluntary Service and the Salvation Army and armed service personnel many of whom spent hours in freezing weather and flooded streets to rescue people from their homes.



THE COUNTY OF ESSEX



FLOOD PRONE LAND IN ESSEX

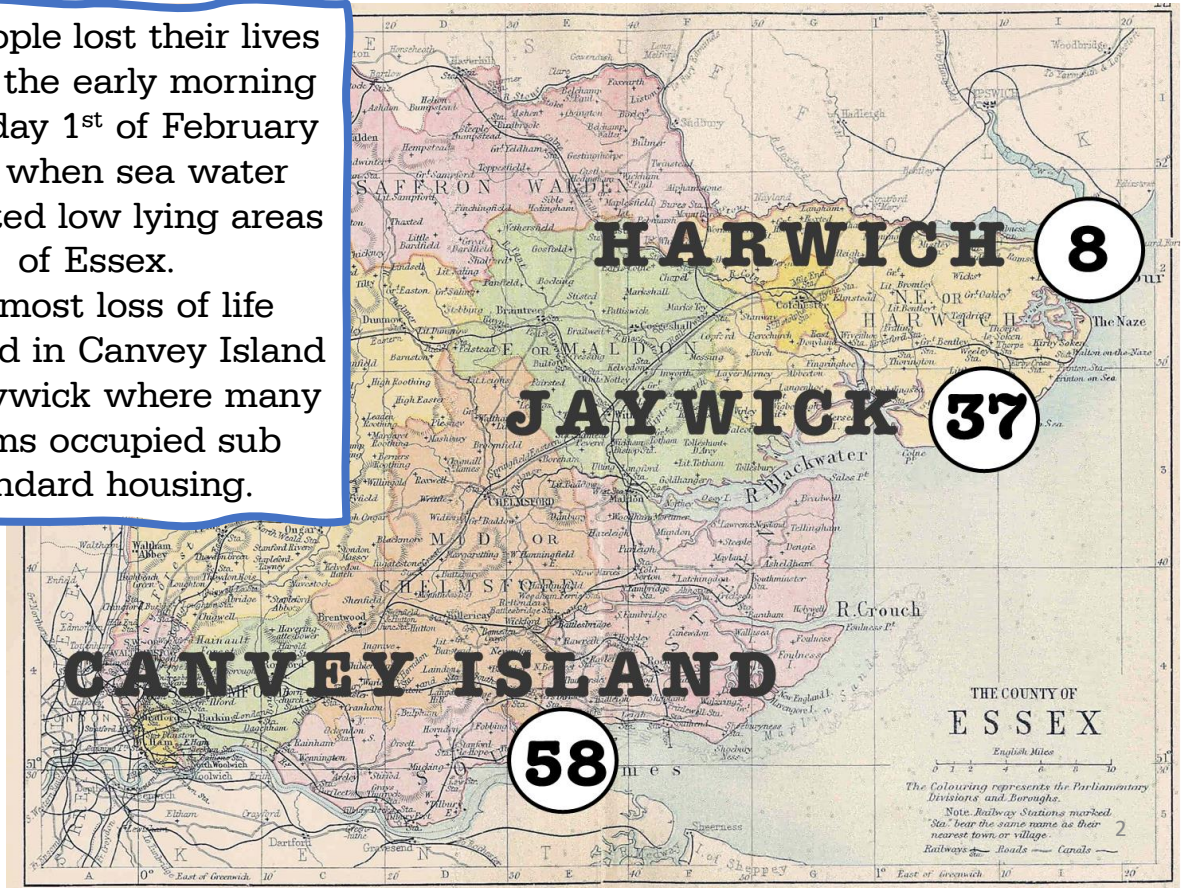


Much of the Essex Coast is flood prone marshlands and saltings

THE DEATH TOLL IN ESSEX

104 people lost their lives during the early morning of Sunday 1st of February 1953, when sea water inundated low lying areas of Essex.

The most loss of life occurred in Canvey Island and Jaywick where many victims occupied sub standard housing.



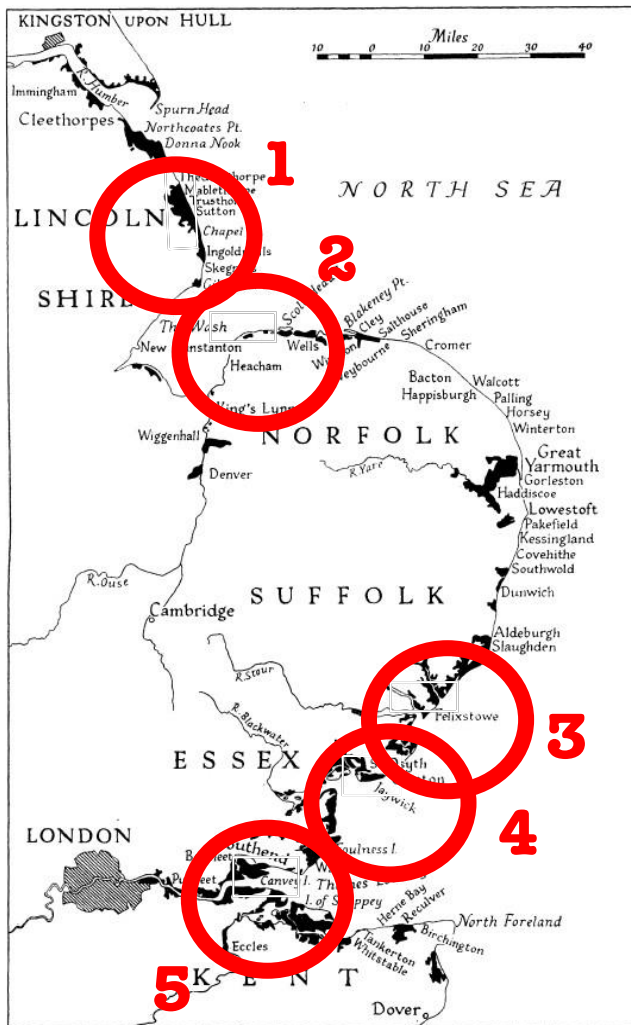
What causes a storm surge?

The main cause of a storm surge is high winds pushing the seawater towards the coast, causing it to pile up there.

There is also a smaller contribution from the low pressure at the centre of the storm "pulling" the water level up, by about 1 cm for every 1 millibar change in pressure.

In the night of 31 January 1953, a storm in the North Sea caused a storm surge which occurred at the same time as a high spring tide. Although the storm and surge were forecast in advance, public warning systems were not very effective at this time and many people were not prepared for the flooding. More than 2500 people were killed around the North Sea coastline, including 307 in England and 19 in Scotland.

FACT FILE



The storm surge hit the shore at Spurn Head, Yorkshire, at 16:00, before progressing southwards along the east coast of England, causing a further 307 deaths. Of these deaths, 216 (70%) occurred in five main clusters: **1)** Mablethorpe and Sutton on Sea (16 dead), **2)** Hunstanton and Snettisham (65 dead), **3)** Felixstowe and Harwich (over 40 dead), **4)** Jaywick (37 dead), and **5)** Canvey Island (58 dead)

No warnings. Despite the significant lag time between the first landfall at Spurn Head, and communities like Canvey Island in Essex, further down the coast, who were not inundated until 01.10 on February 1st, **no direct public warnings were issued, and each community dealt with the deadly deluge independently.**

The central government was slow to react to the flooding, so that until Monday, February 2nd, each locality dealt independently with the unfolding situation. Much of the immediate rescue work was carried out by local authorities, communities, and military servicemen, both British and American, based in the afflicted areas.

A U.K. Government circular issued in June 1952, had ordered that improvements on the already dilapidated coastal defences be slowed or halted completely due to steel shortages.

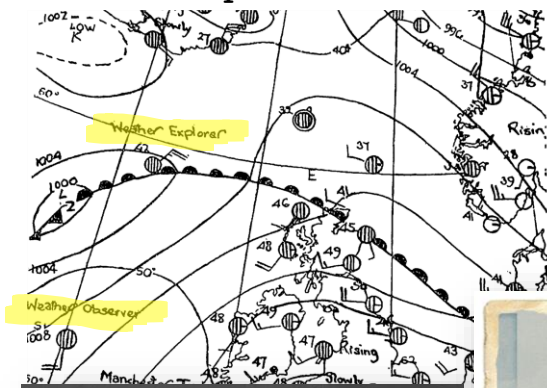


Tracking the weather

The important role of the U.K. Meteorological Office

Formed in 1854, as a small section in the British Governments Board of Trade, the British Meteorological Office became part of the Air Ministry in 1919 to provide weather forecasts for the military services and subsequently, mariners, aviators and the public..

Providing weather conditions for shipping was a recognised function of the Meteorological Office from 1921 when weather reports from ships in the North Atlantic were used to form the weather forecasts. After the Second World War, ex Royal Navy "Flower Class" Corvettes were used as dedicated "weather ships".



Locations of British Weather Ships

Weather Explorer

Weather Watcher

Weather Observer



The "Flower Class" Corvettes featured in the 1953 Ealing Studios film "The Cruel Sea"

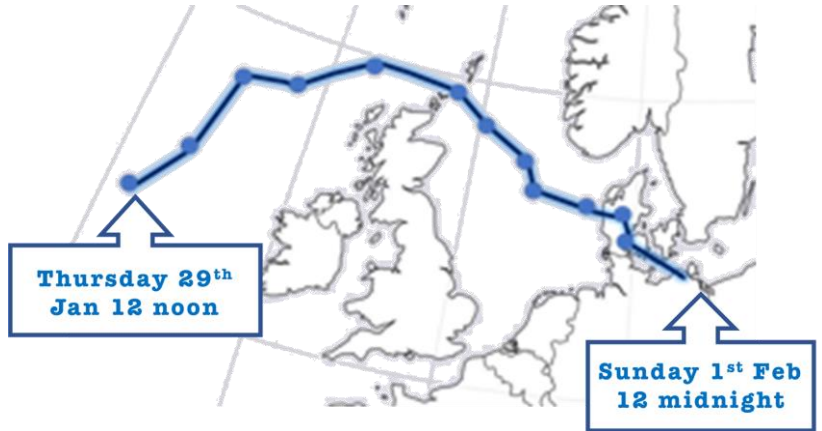
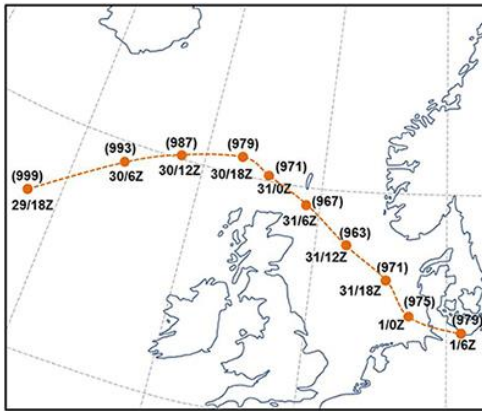
Information on the Atlantic Ocean weather conditions were radioed to the British Governments Meteorological Office by the weather ships and these reports were combined with the land based reports and weather maps were prepared



Dunstable – the forecasting department

Contributing to the disaster 1

The weather event



The weather event that caused destruction and death in Essex overnight on the Saturday 31st of January and Sunday 1st of February 1953, commenced as a low depression in the North Atlantic Ocean at 12 noon Thursday 29th January 1953.

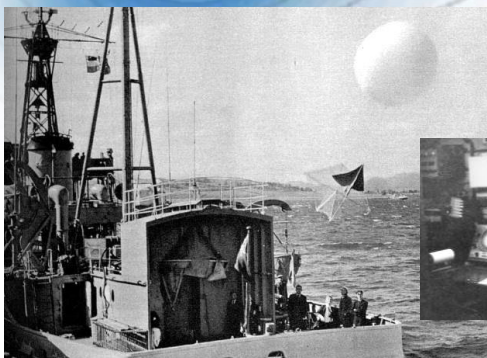
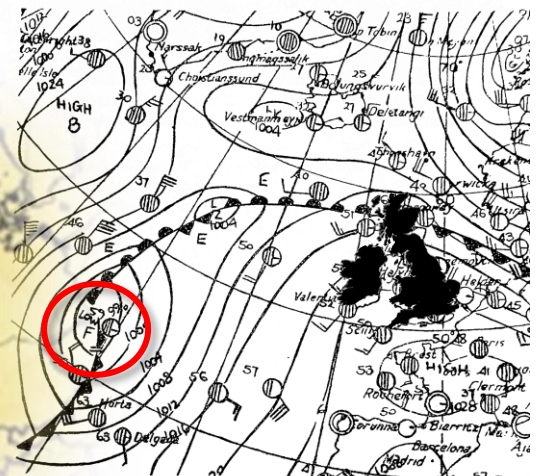
It dissipated at midnight on Sunday 1st February 1953 in the Netherlands after tracking down the North Sea.

11.30 am Thursday 29th January 1953

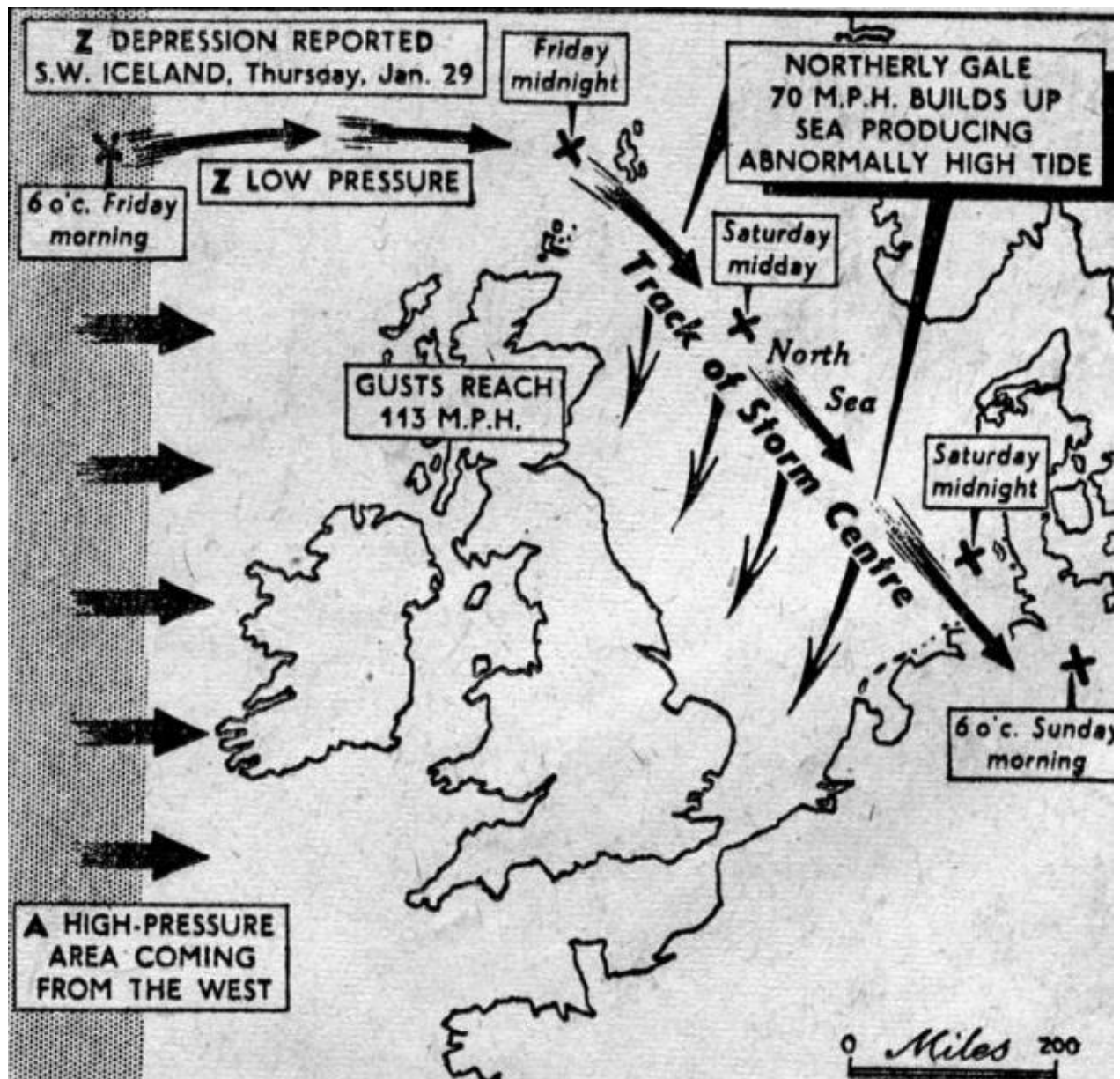
JANUARY 1953

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

A low pressure system starts to form south of Iceland. Under a depression, air is rising, forming an area of low pressure at the surface when the weather is dominated by unstable conditions



The depression was tracked by Royal Navy weather ships stationed in the North Atlantic collected and transmitted to the U.K. Governments Meteorological Office at Dunstable, Bedfordshire



11.30 am Thursday 29th January 1953

The low depression was named "Low Z".

6.00 pm Thursday 29th January 1953

1,000

"Low Z" pressure had dropped to 1,000 millibars.

Midnight Thursday 29th January 1953

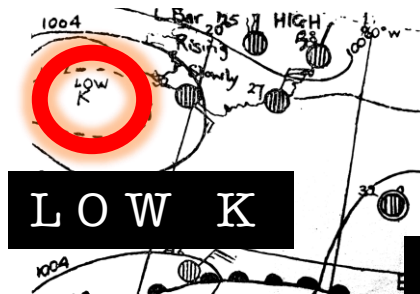
"Low Z" pressure had dropped to 996 millibars

Friday 30th January 1953

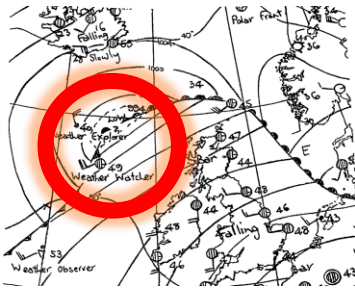
JANUARY 1953

S	M	T	W	T	F	S
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4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Early in the morning, old depression “Low K” off Iceland, merged with “Low Z”



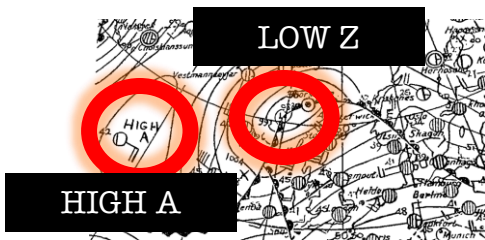
6.00 am Friday 30th
January 1953



“Low Z” had reduced to 994 millibars
The average pressure for the north
of the British Isles was 1,009
millibars.

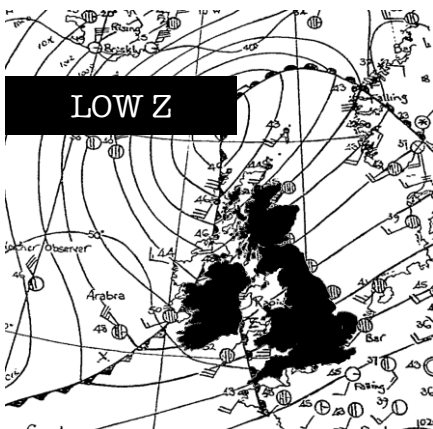
994

Noon Friday 30th January 1953



By 12 noon on Friday 30th January, 1953,
“High A” was developing in the Atlantic to
the west of “Low Z”

6.00 pm Friday 30th January 1953

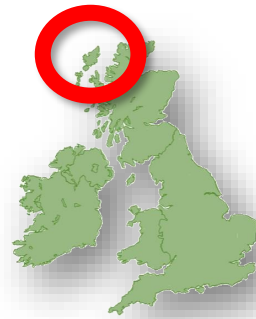


The location of “Low Z” at 6.00 pm on
Friday, 30th January 1953

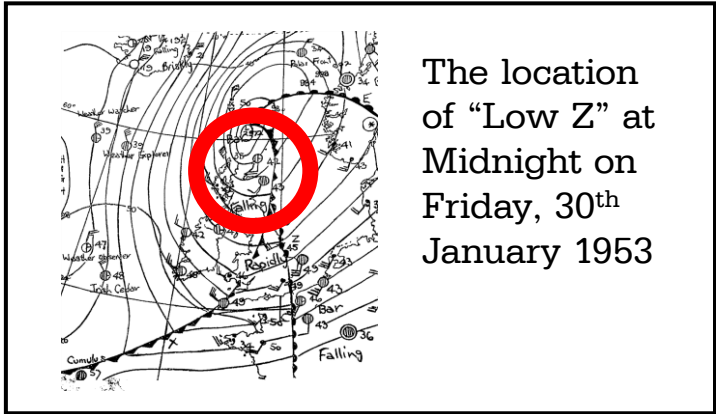
9.00 pm Friday 30th January 1953

At 9.0 pm, the severest gale every recorded by
the Meteorological Office was witnessed when a
North Westerly gale reach 70 to 80 m.p.h. across
the Hebrides,

HEBRIDES



Midnight Friday 30th January 1953



The location of "Low Z" at Midnight on Friday, 30th January 1953

JANUARY 1953						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
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Saturday 31st January 1953

Gale speeds break all records

The UK Government's Meteorological Office had no records of such strong winds when overnight on Saturday morning, wind speeds of 70 mph to 80 mph were recorded which was at "Hurricane Level"



by The Royal National Lifeboat Institution using a breeches buoy



In the early morning of Saturday the 31st January, the "Clan MacQuarrie" was driven aground by gale force winds off the Butt of Lewis – all 66 persons on board were saved by The Royal National Lifeboat Institution using a breeches buoy



Butt of Lewis



breeches buoy

Saturday 31st January 1953



In the early morning of Saturday the 31st January the trawler "**Michael Griffiths**" met gale force winds and floundered off Fleetwood with the loss of all 13 hands.



THE TIMES

The "Times" weather forecast for Saturday, 31st January 1953

"There will be a vigorous trough of low pressure moving across the British Isles"



During the early morning before dawn, the wind over the North Sea was south westerly, which caused the sea level in the southern part of the North Sea to be lower than the northerly part.



In the early hours of Saturday, 31st January 1953, the high tide was **one foot below the predicted level** due to the gale force winds driving the sea water from south to north.

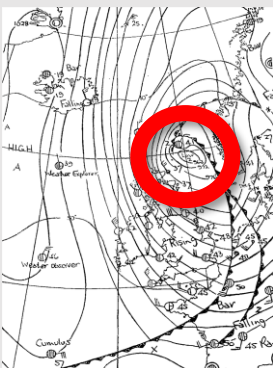


6.00 am Saturday 31st January 1953

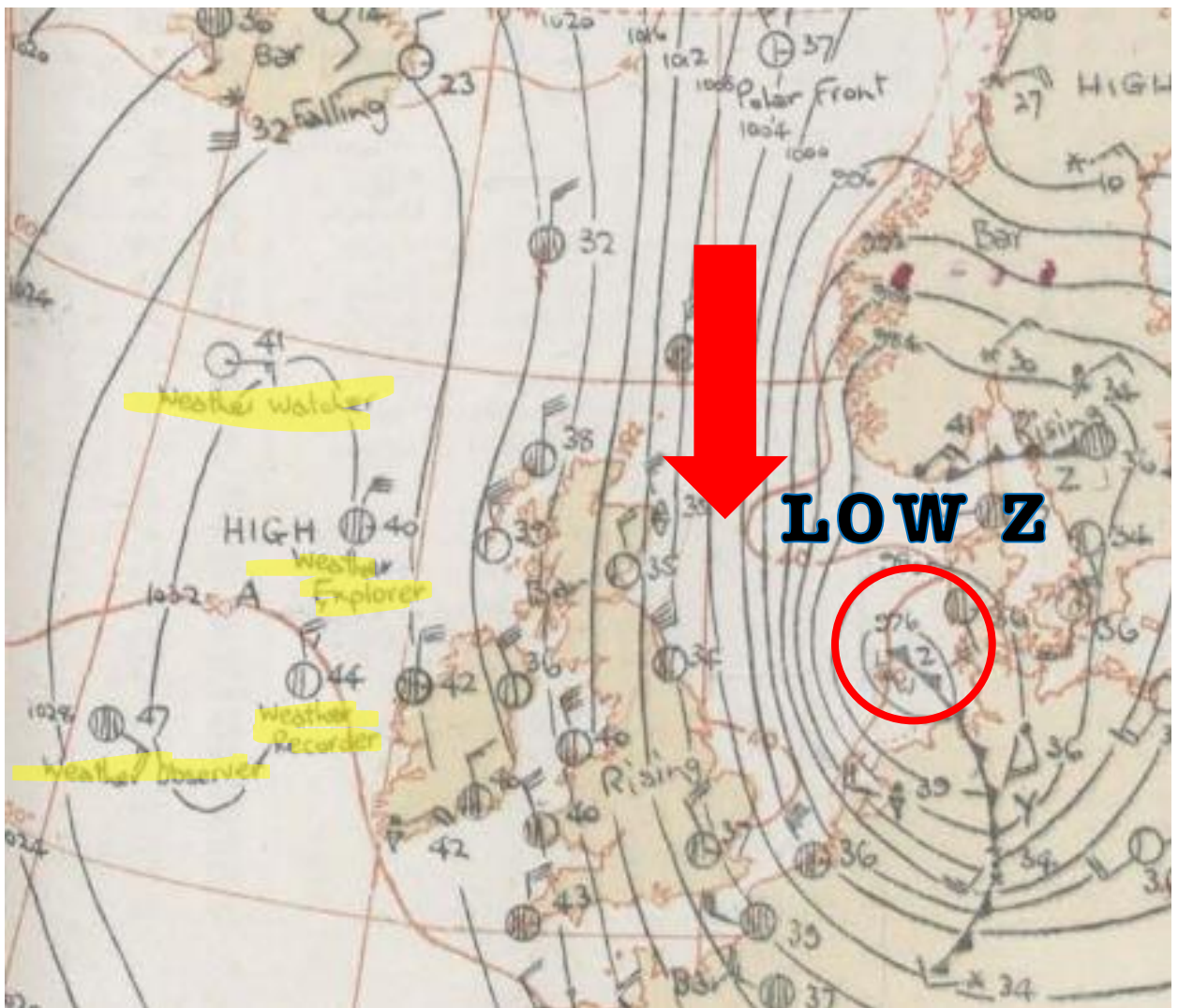
968



The lowest pressure of 968mb was recorded at 6 a.m. on the Orkneys



The location of "Low Z" at 6.00 a.m. on Saturday 31st January 1953



6.00 p.m. Straight down the North Sea

Although heading towards Demark, after
6. p.m. "Low Z", turned towards the North Sea

Contributing to the disaster 2



No National Warning System



During the Second World War, Britain had a network of air raid sirens, but by 1946, the network was deemed to be obsolete so any public warnings were the responsibility of local police forces using loud speaker cars and the fire brigades that had control over ex war sirens that were now used to call out volunteer or part time fire service personnel.



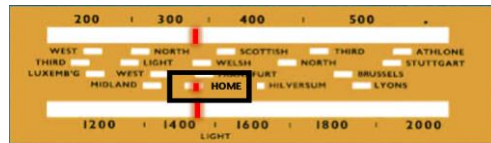
The role of the British Broadcasting Corporation

Formed by a consortium of radio manufacturers in October 1922 as the British Broadcasting Company, the UK Government took control in 1927 as the British Broadcasting Corporation (B.B.C.). Its charter was to provide “culture”, entertainment, news and weather forecasts. The B.B.C. held the monopoly for radio broadcasting in the United Kingdom until 1973 when commercial radio commenced



BROADCASTING THE WEATHER FORECASTS

The B.B.C. broadcasted weather forecasts, several times a day on the B.B.C. “Home Service” on both the medium wave and the long wave



A typical 1953 radio set station dial showing the Home Service

B.B.C. “HOME SERVICE” NEWS AND WEATHER

Saturday

1953

Sunday

6.55 a.m. weather.

7 a.m. 8.00 a.m. 12.55 pm weather.

1. p.m. 6 p.m.. 9 p.m.

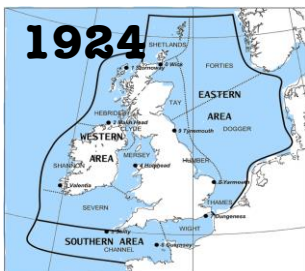
11.00 p.m..

7.55 a.m. weather 8. a.m.

12.55 p.m. weather 1. p.m.

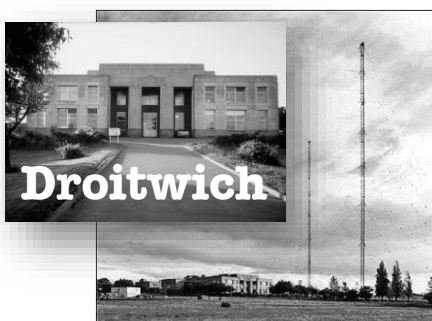
5.55 pm weather 6 .p.m...

9 p.m.. 11. p.m.



The Shipping Forecasts

In 1924, the British Broadcasting Company. commenced broadcasting the Meteorological Office weather forecasts for shipping from their London transmitter and a chart was used to identify the “weather areas”.



In July 1924, the British Broadcasting Company experimented with high powered long wave transmissions at Chelmsford, Essex, and after a successful trial period, a long wave transmitter was constructed at Borough Hill, Daventry in Northamptonshire, which took over from Chelmsford in 1925.

[illegible]

At 7.45 am on Saturday 31st January the British Railways “Roll on – Roll off” ferry “**M. V. Princess Victoria**” left Stranraer, Scotland for Larne in Northern Ireland. **Within minutes of leaving the harbour, the vessel met a huge storm and despite the best efforts of the crew, the vessel floundered at 10.30 am. and sank with a loss of 133 people at 2.00 pm.**

10.30 am Saturday 31st January 1953

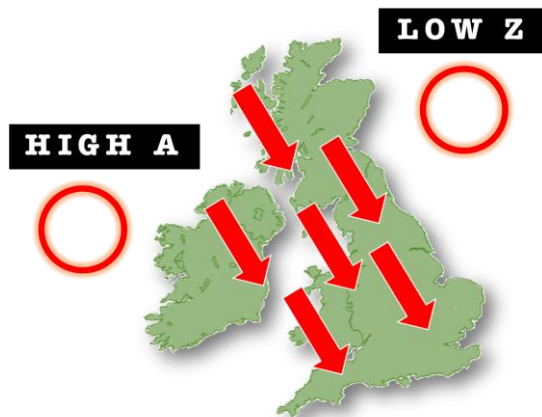
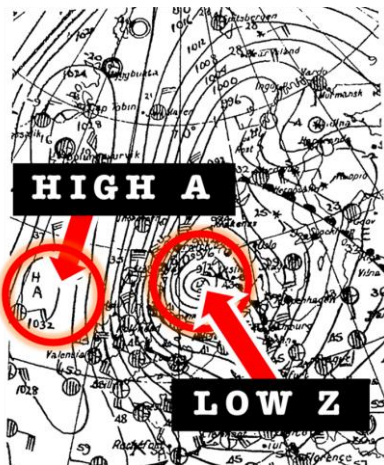
“QUEEN MARY” SAILING DELAYED



Due to the freshening wind, the sailing of the 81,000 ton “Queen Mary” from Southampton to New York was delayed

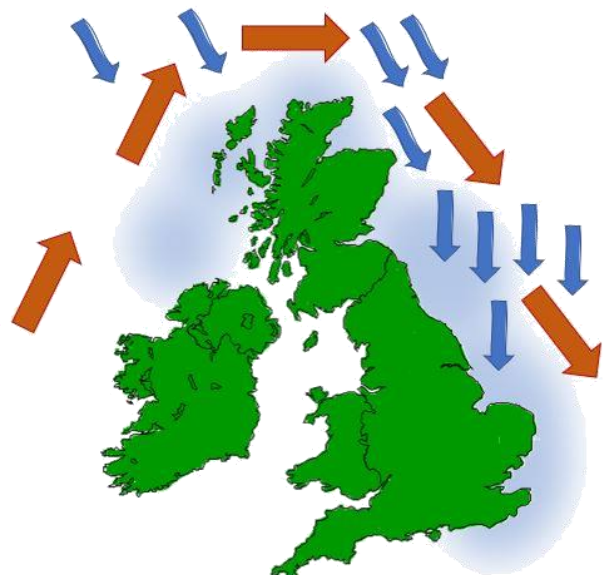
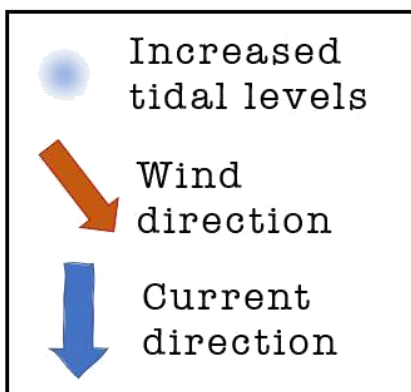


12 noon Saturday 31st January 1953



The combination of “High A” and “Low Z” resulted in gale force winds being generated across the British Isles.

12 noon Saturday 31st January 1953



FLOOD WARNING

The Flood Warning System in 1953

Although there was no “National Flood Warning Systems” in the UK in 1953, there were “local arrangements” to warn of potential floods.

THAMES FLOOD WARNING SYSTEM



In 1928, the River Thames flooded in London and subsequently, a Flood Warning System was established

New Scotland Yard received a message from the Meteorological Office advising the conditions were favourable for an abnormally high tide and “standby warnings” were sent to the City of London Police and the Metropolitan Police Districts bordering the Thames to arrange loudspeaker cars to warn the public.



As a result of the River Thames 1928 flood, a warning system was established in 1931 by the London County Council with the co-operation of the Southend-on-Sea County Borough Council

THAMES FLOOD WARNING SYSTEM

TIDE GAUGE



TIDE GAUGE



Southend Pier tide gauges

If the tide reached 21 feet above low water mark, one, or both of the tide gauges at Southend Pier would sound a warning in the Southend-on-Sea Central Police Station

When the tide warning horn sounded in Southend Central Police Station, the duty officer would advise the London County Council, New Scotland Yard and The Port of London Authority,

The Port of London Authority



HARBOURMASTERS

The main responsibility of any Harbour Master is to enable safe navigation in their harbour and its approaches and as such, they observe tide levels and movements and give an alarm and warnings should a higher than average high tide occur.

THE RIVER BOARDS

A standard arrangement existed between East Anglian River Board of communicating advance notice of potential high tides to the Essex Rivers Board



East Anglia Rivers Board

12.05 pm Saturday 31st January 1953



New Scotland Yard received a message from the Meteorological Office advising the conditions were favourable for an abnormally high tide and “standby warmings” were sent to the City of London Police and the Metropolitan Police Districts bordering the Thames to arrange loudspeaker cars to warn the public.

Saturday
afternoon



In the Moray Firth region of Scotland, the wind flattened thousands of acres of forest representing 5% of the U.K. Conifer plantations

Uneasiness and foreboding

During Saturday, the 31st January 1953, some people on the east coasts of Scotland and England were monitoring the seas – the ebb tides had not receded as normal and the gale force winds were likely to create an higher than average high tide.

Contributing to the disaster 3

Inadequate sea defences

There are a number of low lying areas in Britain, particularly Lincolnshire, Norfolk, and Essex, some of which are barely above sea level. Some of the sea defences in these areas were of an inadequate design and in poor repair to meet the tidal surges in 1953.

RECLAIMING FLOOD PRONE LAND



The creeks and marshes along the Essex coast contain large areas of salt marsh which were used to graze sheep in summer, but were often flooded and inaccessible in winter.

As the land was more valuable if it could be reclaimed from the sea, plans were developed to drain the land and protected it from the salt water flooding by a sea wall.

RECLAIMING FLOOD PRONE LAND

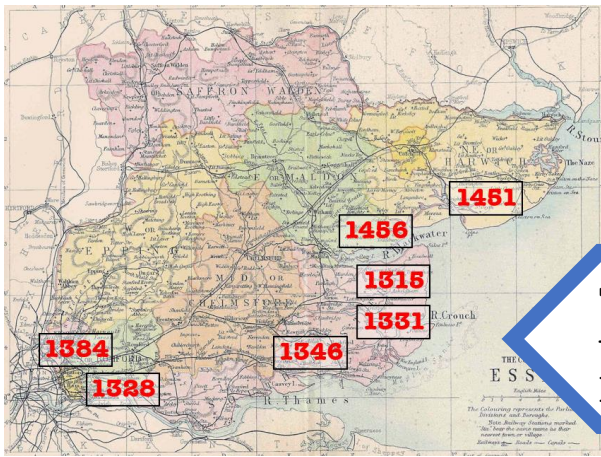
FACT FILE

From Roman Times, efforts had been made to reclaim flood prone land by creating sea walls, dykes and sluices



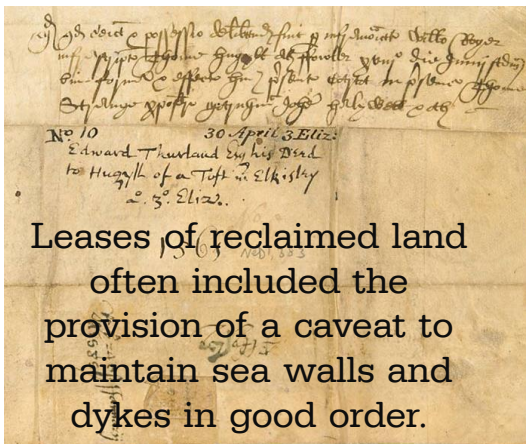
In 1258, a “commission” was issued by Henry III to a justice to levy land owners in Lincolnshire to pay for the cost of sea walls and their maintenance as they benefited from flood mitigation and land reclamation

In 1280, the first “commission” for Essex was created and by 1385, fifty “commissions” were established to provide flood protection and mitigation



The Statute of Sewers was a 1531 law enacted by the English Reformation Parliament of King Henry VIII. It sought to make the powers of various “Commissions of Sewers” permanent

The locations and years in which some of the “commissions” were established in Essex



Leases of reclaimed land often included the provision of a caveat to maintain sea walls and dykes in good order.

In 1531, the Statue of Sewers was enacted that gave “commissions” legislative power to impose taxes upon landowners and to impose penalties for non payment of those taxes. The term “sewers” referred in those times to all waterways and creeks emptying into the sea or an estuary

Commissions of Sewers Act 1708

This Act of Parliament established permanently appointed local Boards of Commissioners, as Justices of the Peace, that were responsible for the maintenance of sea banks and other defences, which protected low-lying areas from inundation by the sea, and the removal of obstructions in streams and rivers caused by mills, weirs and sluice gates. Through Quarter Sessions, rates could be raised from landowners for the maintenance of sea walls

In the 16th and 17th centuries, Dutch engineers were engaged to reclaim land in the Thames Estuary after successfully draining The Fens in Norfolk

RECLAIMING FLOOD PRONE LAND

FACT FILE



Sir Cornelius Vermuyden, a Dutch engineer, introduced Dutch land reclamation methods to England and in the period of 1621 to 1623. He repaired a sea wall at Dagenham and reclaim land in Canvey Island from the sea

Canvey Island

Dagenham

MAINTAINING THE FLOOD DEFENCES

Land Drainage Act 1930

One unusual aspect of this Act was that it repealed most of the legislation that had preceded it including the 1531 “Statute of Sewers”. Under the Land Drainage Act, “Catchment Boards” were established to raise rates from all landholders in the catchment areas and the Boards were required to build and maintain river and sea defences, waterways and sluices In Essex, Catchment Boards were established for the Essex Rivers, the River Roding and the River Stour



River Boards Act 1948

The Essex River Board Area was defined in 1951 and a board was established in 1952 to operate within it and to take over all the functions of the River Roding, Essex Rivers, and River Stour Catchment Boards, which were then dissolved

The Essex River Board

The Essex River Board met for the first time on the 14th July 1952 – it was responsible for 300 miles of sea and tidal defences – it had the benefit of an 85% U.K. Government grant of the cost of capital expenditure that had been approved by the Government



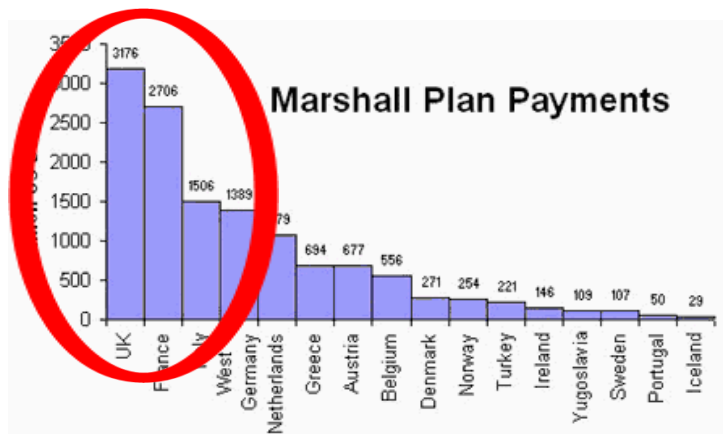
In 1951, the Heneage Report on Land Drainage noted that the lack of financial resources of the various drainage boards would force them to either economise on maintenance expenditure or defer capital works scheme for new works.

A lost opportunity

The Marshall Plan

The Marshall Plan was an American initiative enacted in 1948 to provide foreign aid to Western Europe. The United States transferred over \$13 billion (equivalent of about \$114 billion in 2020) in economic recovery programmes to Western European economies after the end of the Second World War

Britain received the largest share of the payments but unlike other European countries, it chose to spend most of the money on the recently created National Health Service and maintaining the “Stirling Area” to remain a “World Power”.



Far from Marshall Aid boosting British investment, planned programmes were heavily cut after Sterling was devalued in 1949, caused by a balance-of-payments crisis. In 1950, Britain's investment in industry and infrastructure came to only 9 per cent of GNP, compared to Germany's 19 per cent which was a fifth less than the German total.

Electrification delayed – new steam train introduced

An example of the lack of infrastructure investment was to be seen in the railway services that ran in south east Essex from Fenchurch Street in London to Southend, Shoeburyness and Tilbury.

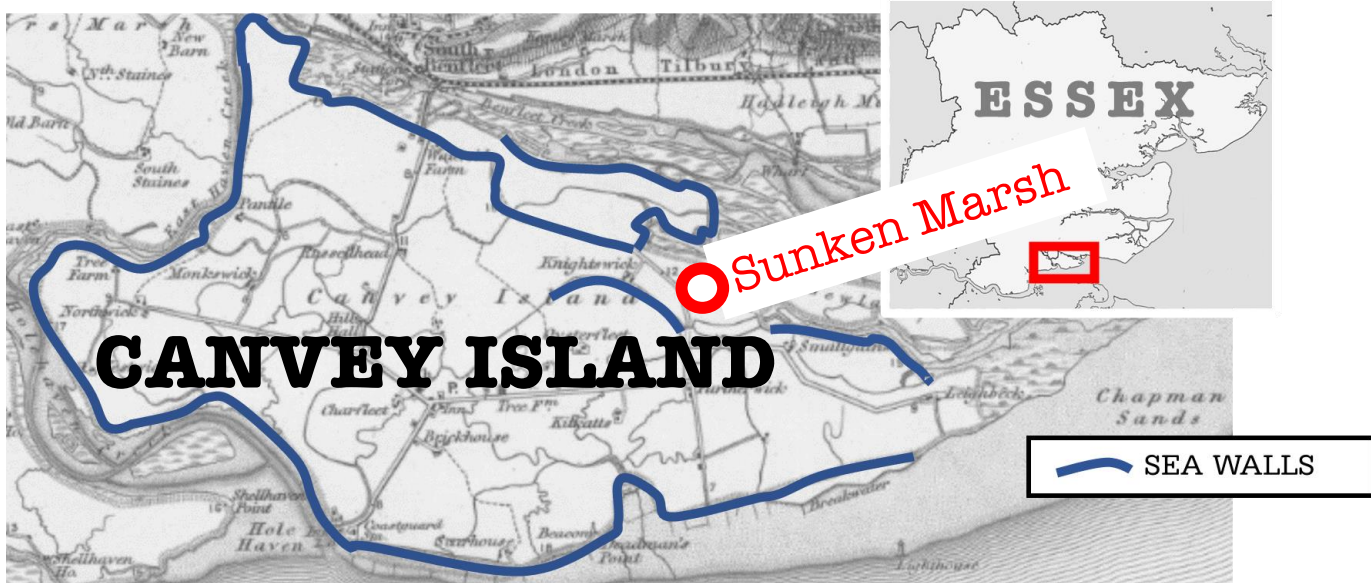


The U.K. Railway Executive London Plan Working Party Report of 1949 recommended the electrification of these services but this did not occur until 1962 due to lack of finance. In fact, in 1953, the year of the Flood, British Railways introduced brand new steam tank engines to service the London, Tilbury and Southend line instead of electric trains.

Contributing to the disaster

Inadequate sea defences

A U.K. Government circular issued in June 1952, had ordered that improvements on the already dilapidated coastal defences be slowed or halted completely due to steel shortages.



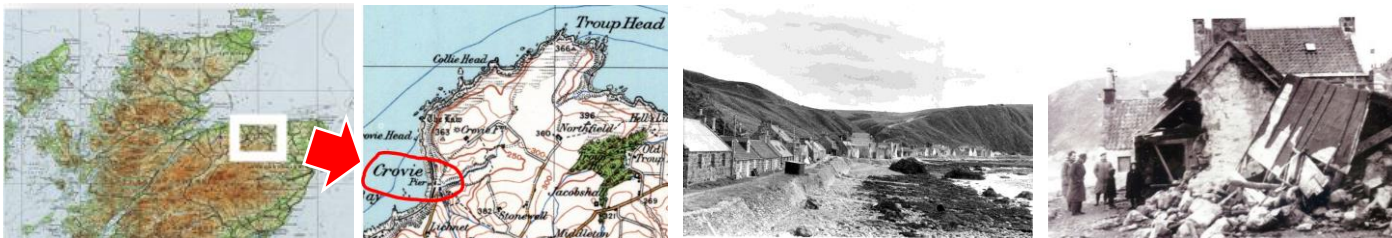
The sea wall protecting Sunken Marsh was not rebuilt to meet the 1949 standards as required by the Coast Protection Act 1949. This Act provides for measures against erosion and encroachment of the coast of Great Britain by the sea.

Saturday 31st January 1953

Saturday afternoon

Storm damage occurs on the land

The fishing hamlet of Crovie on the north coast of Aberdeenshire, was the first place to receive serious damage from the storm, to such an extent, the fishing industry ceased with the collapse of a number of structures forcing the residents to flee.



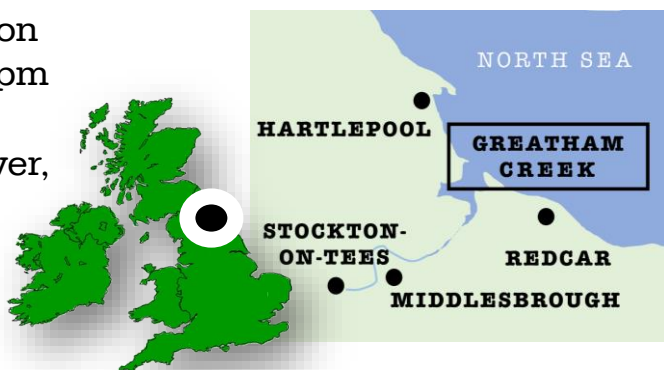
The fishing hamlet of Crovie, Aberdeenshire

3.30 pm Saturday 31st January 1953

The first overflow

The first recorded overflow of the tide on the 31st January 1953 occurred at 3.30 pm when the river Tees overflowed at Greatham Creek in the mouth of the river, but high tide wasn't due until 4.45 pm.

There were two breaches of Greatham Creek on both the North and South embankment



5.00 pm Saturday 31st January 1953

The first inundation



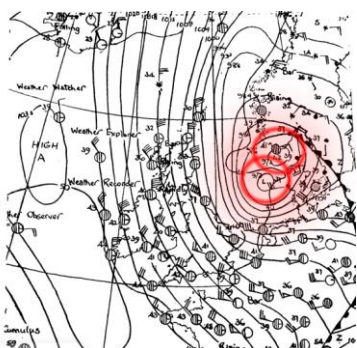
The first breaches were recorded on the Northumberland coast at 5 pm on Saturday and spread southwards over the following 8 hours during the night. By 5.30 pm, water from the North Sea was lapping the cobbles stones of the village of Easington, in the East Riding of Yorkshire, one mile from the coast.

5.25 pm Saturday 31st January 1953

At 5.25 pm, the North Sea breaks through at Sandilands, Lincolnshire.



6.00 pm Saturday 31st January 1953



"Low z" creates two centres



The first radio news bulletin on the weather event

BBC 6 PM RADIO NEWS

"Reports are just coming in that a British Railways car ferry traveling from Stranraer in Scotland to Larne in Northern Island has floundered in the gales now sweeping the British Isles."



6 p.m. B.B.C.
weather forecast



The weather forecast predicted the high winds would "die down" on Saturday night and Sunday.

Saturday 6.00 p.m.

First tide warnings sent to Essex

A standard arrangement between East Anglian River Boards of communicating advance notice of potential high tides resulted in a message being received at the Essex Rivers Board House in Chelmsford of a partial high tide in Norfolk.

6.45 pm Saturday 31st January 1953



Kings Lynn in
Norfolk becomes
inundated

7.00 pm Saturday 31st January 1953



**15 People tapped in
houses and drowned**
when the River Ouse
overflowed its banks in
Kings Lynn.

7.30 pm Saturday 31st January 1953

Hunstanton

Snettisham

Kings Lynn

Between Hunstanton and Kings Lynn **65 people drowned.**

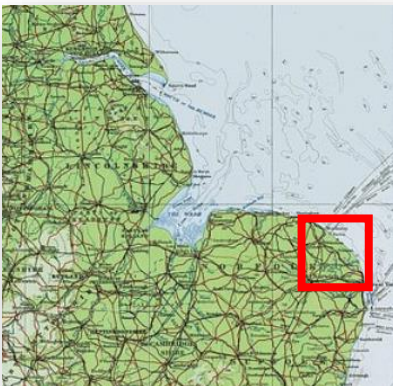
Forty bungalows in south Hunstanton, home mainly to American servicemen and their Norfolk wives, were flooded. A hundred people drowned around the coast of Norfolk - **25 of them in Snettisham.**



8.00 pm Saturday 31st January 1953



The sea breaks through at Sea Palling, Norfolk - **7 people drowned.**



BBC 9 PM RADIO NEWS

The BBC 9 o'clock radio news was the first time a reference was made to the flooding situation by reporting the sea breaking over the promenade at Bridlington in Yorkshire. **The BBC had no other information relating to flooding.**



9.00 pm Saturday 31st January 1953

Lincolnshire Police headquarters issued a press release stating there had been widespread flooding on the Lincolnshire coast between Cleethorpes and Skegness. It added the position is not serious at this stage, but fresh flooding will probably occur with the high tide.



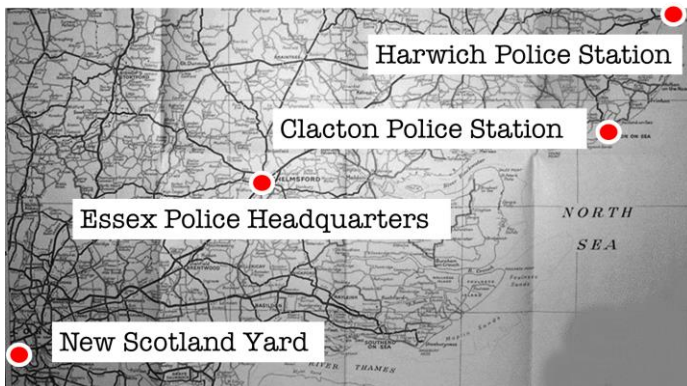
9.40 pm Saturday 31st January 1953



At Harwich, as the tide was already 4 feet above the predicted level, the Harwich Harbourmaster sent out warnings of "An exceptional high tide tonight", to the Harwich Police station, where it was passed onto Clacton Police station, and then it was passed onto the Essex Police County Head Quarters at Chelmsford and then to Scotland Yard where it was received at 10.13 pm.

10.00 pm Saturday 31st January 1953

Passing on the information



The duty watch keeper on Southend Pier noted the tide was at the high tide level three and a half hours before high tide and alerted the Coastguard and the Southend-on-Sea County Borough Police.

He suggested residents in Old Leigh be warned of the possibility of flooding.

Old Leigh



10.20 pm Saturday 31st January 1953

First public alarm in Essex

Southend-on-Sea County Borough police with a loudspeaker car, toured Leigh Old Town advising residents of possible flooding

10.30 pm Saturday 31st January 1953

The first high tide overlap in Essex

Water starts to overlap the Quay at Harwich and a police constable reported this to his inspector and subsequently the fire brigade was informed as were residents who lived in homes, some with basements



10.50 pm Saturday 31st January 1953

Harwich Police Station requests Clacton Police Station for a loudspeaker car to come to Harwich to warn the residents near the Quay of flooding



11.15 pm Saturday 31st January 1953

Houses are flooded from the “inside” as water rose in “The Gap” at Walton

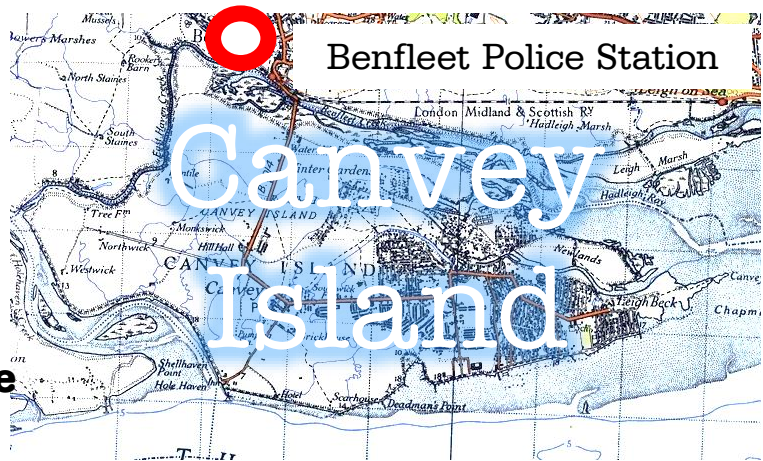
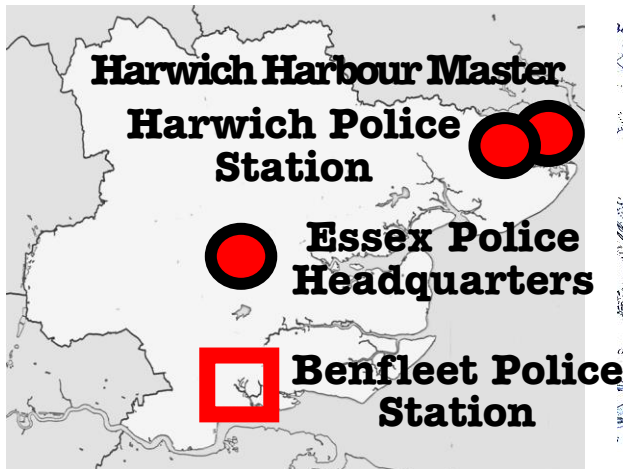


Residents in the low lying areas of Walton-on-the-Naze were alerted to a potential flood tide by the duty police constable after his sergeant had received the warning from the Harwich Harbour Master via Frinton Police Station.



11.20 pm Saturday 31st January 1953

The police sergeant in charge of the Canvey Island division of the Benfleet police station received the Harwich Harbour Master tide warning that was sent to Benfleet Police Station via Essex Police Headquarters at Chelmsford



Sea water started to flood Harwich Old Town



11.30 pm Saturday 31st January 1953



At Brightlingsea, the sea flooded the Pleasure Gardens and the area up to the Coast Guard Station



11.37 pm
Saturday 31st
January 1953

Southend
County
Borough
Police Station



The automatic warning horn installed in the Southend County Borough Police Station started to sound which indicated the water level at Southend Pier had reach a level of 21 feet above the low water mark. On hearing the alarm, the duty officer at Southend Police Station would advise the London County Council, New Scotland Yard and The Port of London of a high tide.

Saturday 11.40 p.m.

The warning received at Southend County Police Headquarters was passed by telegraph to New Scotland Yard, which issued a **“Stage Two” warning** that required loudspeaker police cars to be deployed at specific river front locations to await the **“Stage Three” activation.**

“Stage Three” required the residents that could be affected by flood water to be warned of such, by the loudspeakers police cars.

11.45 pm Saturday
31st January 1953



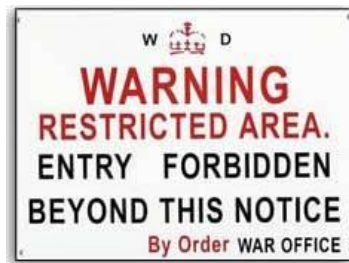
Sea water broke over Stour Road Harwich and poured into the low-lying streets and the Fire Station became flooded.



Fire Station

11.50 pm Saturday 31st January 1953

The War Department duty constable on Foulness Island reported water over the Havengore Bridge.

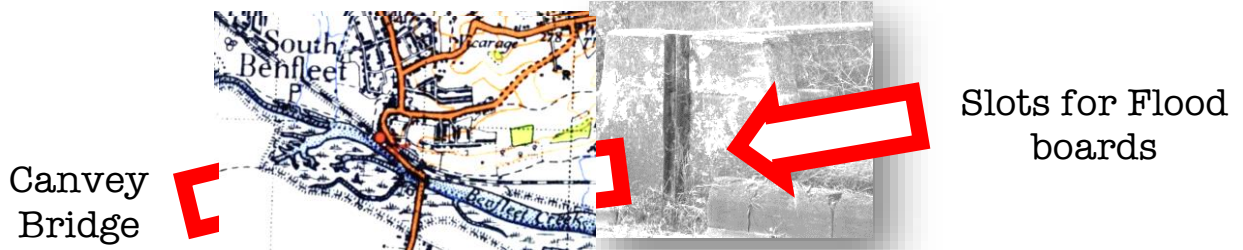


The Essex River Board Divisional Engineer at Upminster sent a message to the River Board representative on Canvey Island **regarding the possibility of an exceptional tide.**



11.50 pm Saturday 31st January 1953

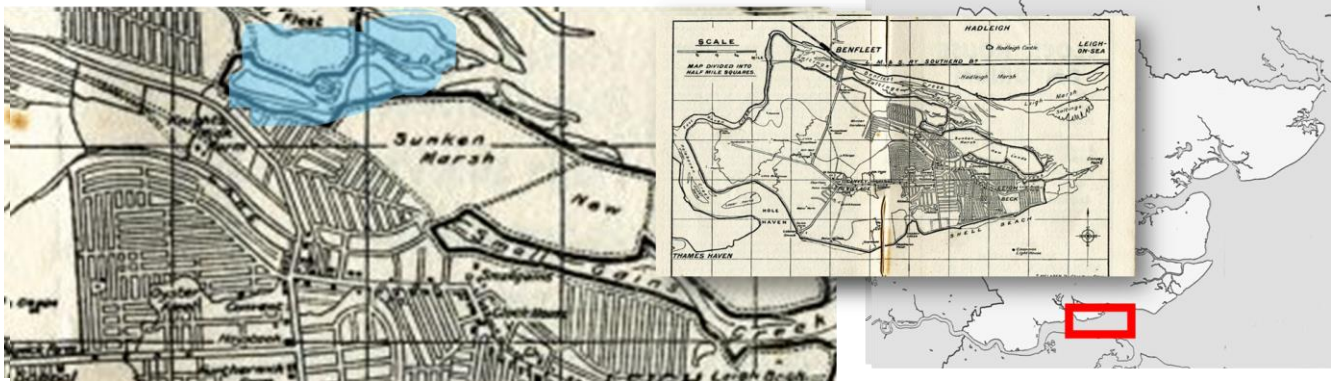
The Essex River Board Canvey representative observed the tide lapping the Canvey Bridge approaches and advised the Canvey Police sergeant that he would ensure **Flood Boards** were placed across the road



11.55 pm Saturday 31st January 1953

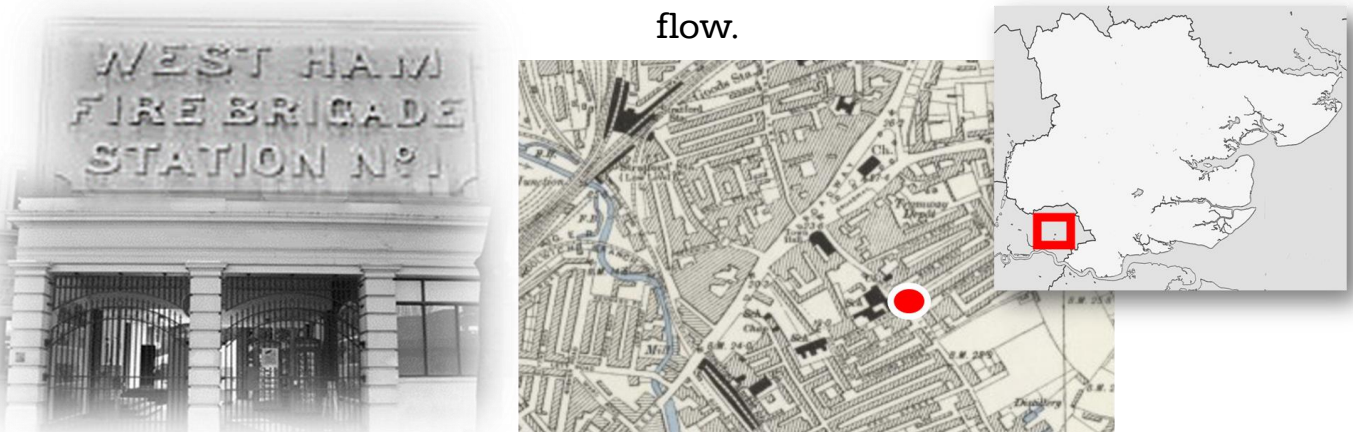
The sea water spills into Canvey Island

Canvey Island – water started to spill “Like a Waterfall” over Twekes Creek, which was not on the seaward side of the Island



11.58 pm Saturday 31st January 1953

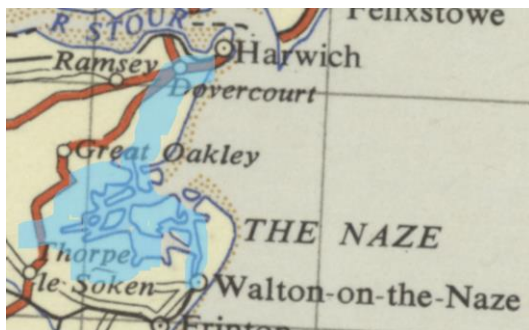
The “**Stage Two**” warning from New Scotland Yard reached the West Ham Fire Station when the tide had more than two and a half hours to flow.



Midnight Saturday 31st January 1953

Saturday 12 midnight

Sea walls were being overlapped from Harwich to the Naze.

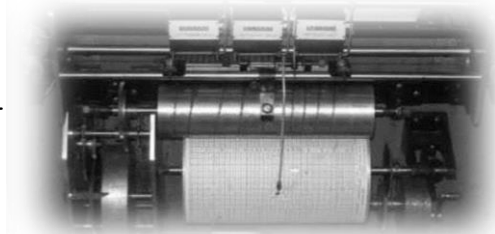


Southend Pier tide gauges

The gauges at Southend Pier were **1.5 feet above danger level**

If the tide reached 21 feet above low water mark, one, or both of the tide gauges at Southend Pier would sound a warning in the Southend-on-Sea Central Police Station

When the tide warning horn sounded in Southend Central Police Station, the duty officer would advise the London County Council, New Scotland Yard and The Port of London Authority,



As prearranged, the BBC's midnight news bulletin broadcast the warning from New Scotland Yard - **"There is a warning from the police of the possibility of an exceptional high tide in the rivers Thames and Medway."**

Sunday 1st February 12.01 am to 12.30 am

February						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

The first 30 minutes of Sunday 1st February 1953, saw flooding occurring at Bradwell-on-Sea, Maldon, Walton and Jaywick

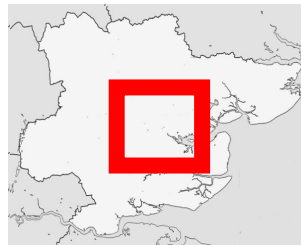


12.05 am Sunday 1st February 1953

The sea defences on the Dengie Peninsula started to collapse and the wall near Bradwell-on-Sea breached allowing the land to be flooded. At nearby St Peter's, the tide appeared to recede as the land began to be flooded.



12.15 am Sunday 1st February 1953



First reports of flooding in the Heybridge Square area in the Borough of Maldon.

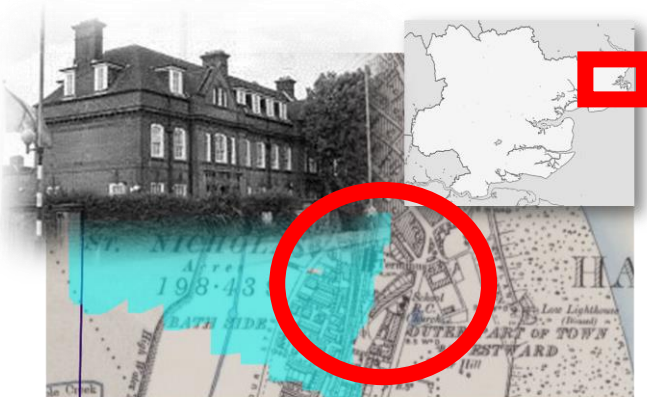
12.20 am Sunday 1st February 1953

The flood waters inundated the “Anchor” public house at Bathside in Harwich and cascaded down the cellar.



The clocks stop in Bathside at 12.20 am

12.30 am Sunday 1st February 1953



Residents of the Bathside area of Harwich went to the police station to report flooding in their neighbourhood.

12.30 am Sunday 1st February 1953



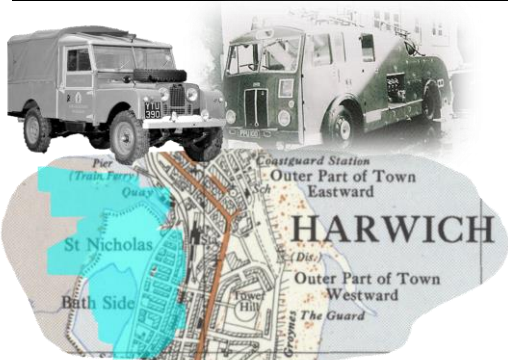
The Walton police patrolling Walton Gap had warned residents of the high tide that began to inundate the area and reported this to Clacton police station.

Point Clear Bay started to see water overlapping the sea wall.

The lower part of Brightlingsea started to flood.

Water started to spill over the sea wall at Jaywick.

12.32 am Sunday 1st February 1953



The Harwich Fire Brigade lost a fire appliance and a Land Rover when the sea inundated Bathside.

12.45 am Sunday 1st February 1953



An area in Colchester, which was not included in the early warning plans, started to flood in the Hythe district.



Water started to flood the area of Brookland's in Jaywick which was an example of "Plotlands" comprising sub standard housing.

12.48 am Sunday 1st February 1953



The train from Colchester to Clacton was forced to stop due to flood water crossing the line between Hythe and Wivenhoe.

Contributing to the disaster 4

Sub standard housing

THE “PLOTLANDS”

The word 'plotlands' was coined by planners for those places where, until 1939, land was divided into small plots and sold, often in unorthodox ways, to people wanting to build their holiday home, country retreat or would-be smallholding. It evokes a landscape of a grid-iron of grassy tracks, sparsely filled with bungalows made from army huts, old railway coaches, sheds, shanties and chalets, slowly evolving into ordinary suburban development

The Essex plotlands were on the heavy clay known to farmers as 'three-horse land', which was the first to go out of cultivation in the agricultural depression; others grew up on vulnerable coastal sites like Jaywick Sands and Canvey Island



JAYWICK SANDS



CANVEY ISLAND

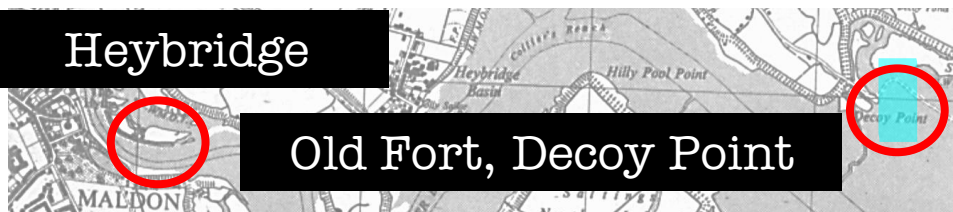
Post war housing shortages also saw a rise in the number of pre-fabricated buildings (mainly in a bungalow design) in many of these low lying areas. This cheap type of housing was also popular with the rising post-war trend of seaside holidays especially in places like Essex and were nearly always located very close to the shoreline. The design of this type of house was never intended to withstand such force and many collapsed or were simply washed along with the current, ending up metres away from where they originally stood or washed out to sea entirely.

12.50 am Sunday 1st February 1953

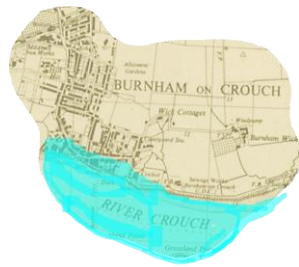
The rising tide appeared to ebb at Heybridge in Maldon as the sluice at Old Fort, Decoy Point failed, which allowing the sea water to flood the land



Heybridge



Old Fort, Decoy Point

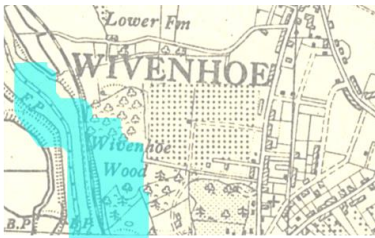


The High Street in Burnham-on-Crouch became flooded to a depth of 3 feet.

1.00 am Sunday 1st February 1953

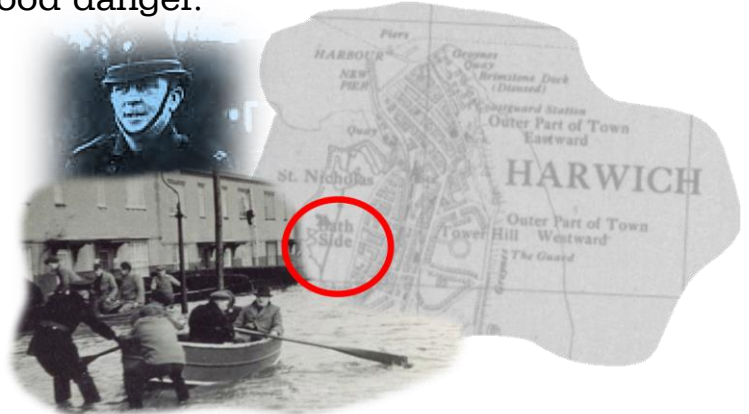
Wivenhoe had no sea wall and water started to spill over the quay and inundate low lying properties

Flooding occurred to ground floor rooms in properties in Rowhedge High Street



1.05 am Sunday 1st February 1953

A police constable at Harwich spent an hour in waist deep water alerting the residents of Bathside of the flood danger.



The marshes each side of the River Blackwater became flooded.

Sunday 1st February 1953

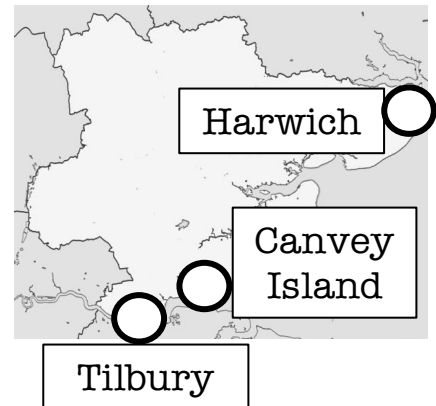
1 am- 2 am



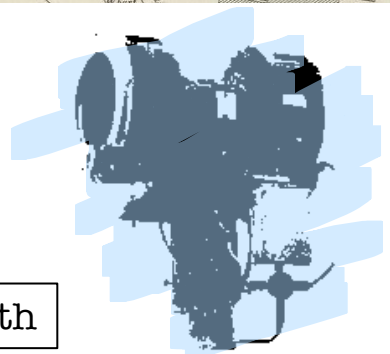
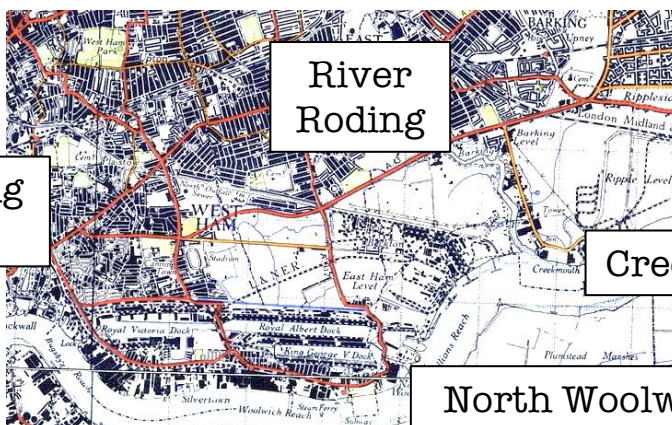
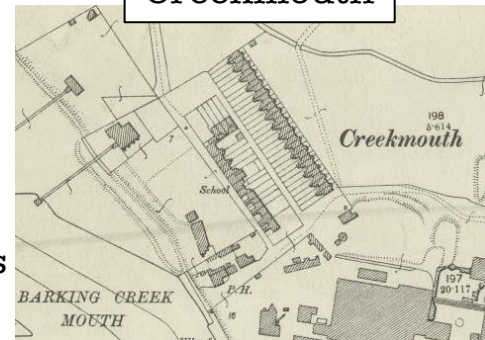
The tide was still rising along parts of the Essex Coast and placed pressure on the sea defences causing an increase in breaches of sea walls which finally totalled 300 during the night

■ FLOODED AREAS

- 1.00 am. HARWICH – the electricity fails.
- 1.00 am JAYWICK – there were 1,768 sub standard built chalets of which 250 were occupied.
- 1.10 am TILBURY – Tilbury Riverside station is flooded.
- 1.10 am RIVER RODING overflows between Barking and Ilford.
- 1.10 am. NORTH WOOLWICH – the tide at the ferry pier is at danger level.
- 1.30 am. CREEKMOUTH – this hamlet of 50 company owned cottages was flooded and in 1957 the hamlet ceased to exist following the demolition of the cottages.
- 1.40 am CANVEY ISLAND – the ex Second World War air raid siren was manually activated by the fire station commander using the “air raid warning” wailing to alert residents to an impending emergency.
- 1.30 am CANVEY ISLAND – there were no boats available for rescuers to search the houses inundated by the floods.
- 2.00 am CANNING TOWN and Silvertown flooded.



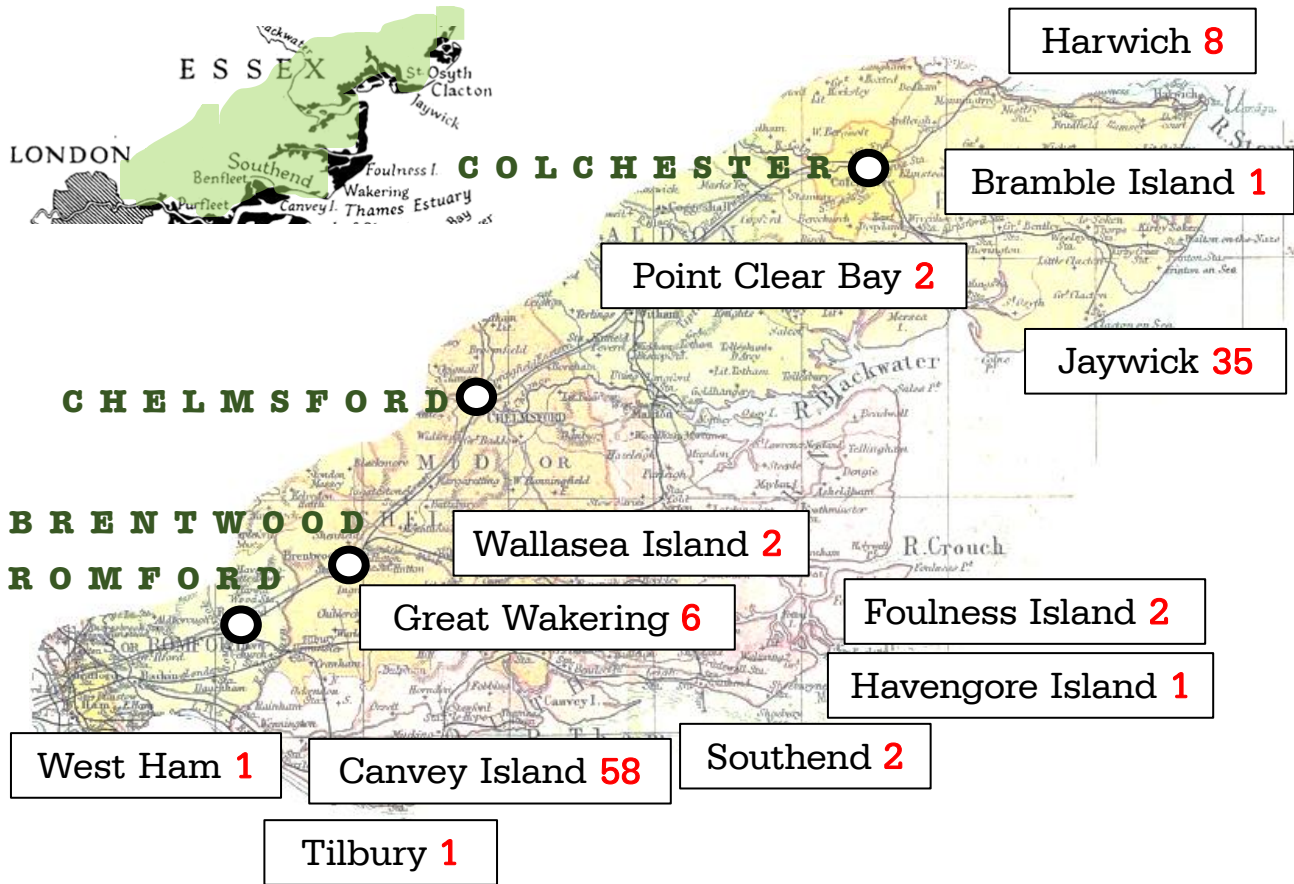
Creekmouth



Second World War Air Raid Siren

The Aftermath

THE DEATH TOLL



OPERATION “KING CANUTE”

In 1949, some flooding occurred in low lying areas of East Anglia and Essex causing the various land drainage authorities to seek assistance from the armed services. The RAF responded with a plan and by December 1949, Operation King Canute was ready for implementation should floods occur.



“Operation King Canute” initiated the arrangements for calling in the troops at a moment's notice. Consequently, following the flooding on Canvey Island the Royal Air Force was mobilised overnight. The first R.A.F. liaison officer was installed in the Essex River Board office at Chelmsford early on Sunday morning (1st February 1953) and the airmen started work on the Canvey Island sea wall on Monday morning (2nd February 1953).

Contributing to the disaster 4



LACK OF WARNINGS - The Coroners Court on the Floods held at Rochford heard that if the Essex Rivers Board had received warnings from Lincolnshire when The Wash was experiencing an exceptional high tide, lives in Essex could have been saved.

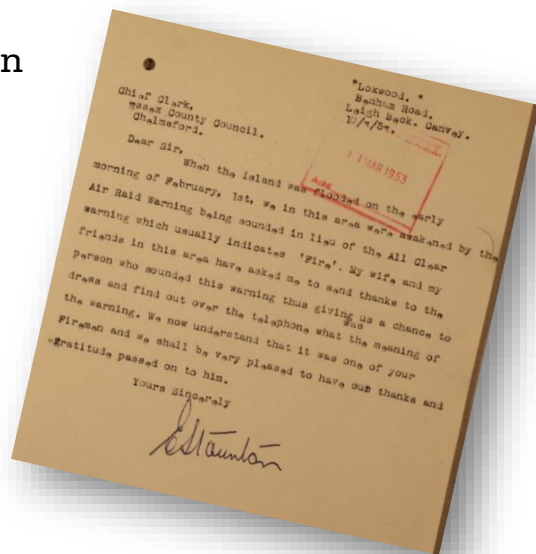
ACKNOWLEDGMENTS AND AWARDS



The 1953 Coronation Honours were appointments by Her Majesty, Queen Elizabeth II, to various orders and honours on the occasion of her Coronation on 2 June 1953. The honours were published in The London Gazette on 1 June 1953 and included hundreds of MBEs and OBEs for those who assisted in the aftermath of the 1953 Floods.

In the 1953 special flood awards, the Queen recognised the gallantry of more than 70 people, from housewives to firemen, policemen, garage proprietors, service personnel and lorry drivers.

Personal acknowledgments of thanks were sent to many people including this letter thanking the Canvey Island Fire Brigade for sounding an "Air Raid Warning" so saving many lives on the Island.



FOUR DAYS TO RESCUE

One of the most dramatic of the flooded Canvey Island rescues, Miss Fowler, 84, is carried from her house where she had been trapped for nearly four days with her 82-year-old-brother without food, light or heat.

HOMELESSNESS

Over 24,000 homes in the UK were seriously damaged. 40,000 people in the UK were left homeless and many people's livelihoods were ruined.

LACK OF CO-ORDINATION

There appeared to be a very serious lack of co-ordination between the Essex Rivers Board and the local authority. As it happened, the Board moved with admirable speed in the work of filling the breaches, but the task of the local authority was not made easier by their lack of knowledge of what was being done. That lack of coordination persisted after the flooding had taken place.

FLOOD WARNINGS CONTROVERSY

For many weeks after the disaster, the absence of general flood warnings to the public caused a lot of controversy. The Meteorological Office stated that a warning was sent by telephone from the Central Forecasting Office at Dunstable in Bedfordshire at 11.30 am on January 31.

The warning, despatched to the Great Ouse Catchment Board and the East Suffolk and Norfolk River Boards, read: 'Exceptionally strong north-west to north winds becoming established over the North Sea.'

The Meteorological Office insisted that its responsibility ended there and it was up to the River Boards to decide upon subsequent action.

SHIPS LOST ON THE 31st JANUARY 1953

IJM 60 Catharina Duyvis. The herringcutter sank in the North Sea during a severe windstorm. **16 fatalities.**

Michael Griffith. The Castle-class trawler from Fleetwood, Lancashire, foundered in a severe storm off Barra Head, West Scotland, with the loss of all hands. **13 fatalities.**

Princess Victoria. The "roll on- roll off" passenger ferry sinks in the North Channel, Stranraer, during a severe windstorm. **133 fatalities.**

Salland. The coastal trading vessel sinks in the North Sea near Egmond during a severe windstorm. **8 fatalities.**

Westland. The coastal trading vessel sinks in the North Sea near Cuxhaven during a severe windstorm. **10 fatalities.**

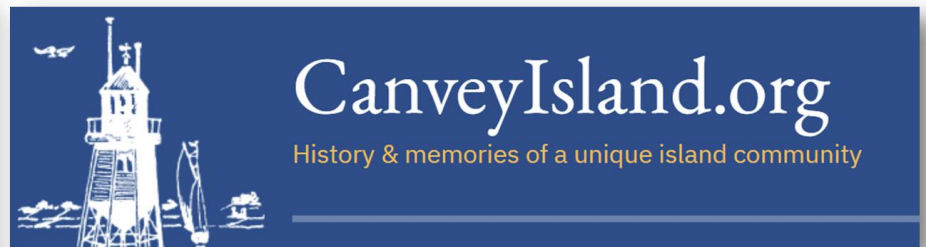
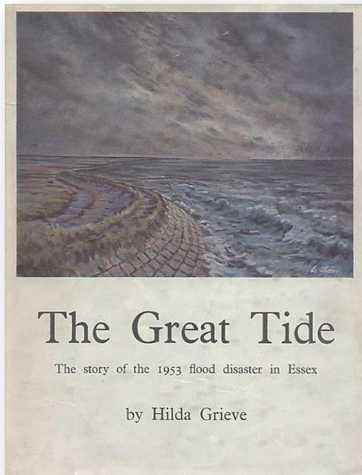
The "*Guava*", a motor vessel of 285 gross tons built in 1945, left Lowestoft on the morning of 30th January for the North Sea fishing grounds. **11 Fatalities.**

SOURCES OF INFORMATION

The information has been obtained from Government reports, Coroner reports, "Hansard", newspapers, the "The Great Tide" by Hilda Grieve, published in 1959 by the Essex Records Office, and the "Essex Coastline:

Then and Now" by M.P.B. Fautley, and J.H. Garon.

Web sites *CanveyIslandOrg.* and *Beyond The Point* provide eye witness accounts



A memorial to those lost in the 1953 Floods on Canvey Island.